

Michael J. Leitch

Invited Talks

M.J. Leitch, “*Quarkonia Production in p-p & p-A Collisions*,” Probing QCD with High Energy Nuclear Collisions, Hirschegg 2005, Hirschegg, Austria, 17-21 January 2005.

M.J. Leitch, “*Quarkonia production in p-A collisions*,” Hard Probes 2004, Ericeira, Portugal, 4-10 November 2004 & Eur. Phys. J. C43, 157 (2005).

M.J. Leitch, “*Overview of Charm Production – J/ψ’s & Open Charm*,” Quark Confinement & the Hadron Spectrum VI, Villasimius, Italy, 21-25 September 2004, AIP Conf. Proc. 756, 393 (2005).

M.J. Leitch (PHENIX collaboration), “*J/ψ Production and Nuclear Effects for d+Au & p+p Collisions in PHENIX at RHIC*,” Lake Louise Winter Institute 2004, Lake Louise, Canada, 15-21 February 2004, Published in *Lake Louise 2004, Fundamental interactions* 220-224.

M.J. Leitch (E866/NuSea & PHENIX collaborations), “*Charm in p(d)-A Collisions: E866/FNAL & PHENIX*,” PHENIX Muon Meeting, Santa Fe, June 16-18, 2003.

M.J. Leitch (E866/NuSea & PHENIX collaborations), “*Charm Production in E866/FNAL & PHENIX*,” The First Three Years of Heavy-Ion Physics at RHIC, Seattle Theory Institute, Seattle, June 2-6, 2003.

M.J. Leitch (E866/NuSea & PHENIX collaborations), “*J/ψ & Heavy-Quark Production in E866 & PHENIX*,” Abdus Salam International Center for Theoretical Physics, Trieste, Italy, May 12-16, 2003 & Eur. Phys. J A19, s01, 129 (2004).

M.J. Leitch, “*Charming Measurements in E866/NuSea*,” International Workshop on Charm Production: from Threshold via SPS to RHIC and LHC, European Center for Theory, Trento, Italy, 17-22 June 2002.

M.J. Leitch, “*J/ψ & Drell-Yan Production in p-A Collisions*,” Workshop on High p_T Phenomena at RHIC, Brookhaven National Laboratory, Upton NY, November 1-2 2001.

M.J. Leitch, “*Charmonium Production in p-A Collisions*,” International Workshop on the Physics of the Quark Gluon Plasma, Ecole Polytechnique, Palaiseau, France 4-7 September 2001.

M.J. Leitch, “*New Measurements of the Nuclear Dependencies of the J/ψ and ψ’ Resonances in High-energy Proton-Nucleus Collisions*,” Spring APS meeting, Long Beach, California, 2 May 2000.

M.J. Leitch, “Results from E866/NuSea,” Hard Probes Collaboration Meeting, Jyvaskyla, Finland, 22 September 1999.

M.J. Leitch, et al., “*Nuclear Suppression of Vector Meson Production in FNAL E866/NuSea*,” Quark Matter ’99, Torino, Italy, 10 – 15 May 1999, Nucl. Phys. A661, 554c-557c (1999).

M.J. Leitch, et al., “*Vector Meson Production and Nuclear Effects in FNAL E866*,”

RIKEN-BNL Workshop on Quarkonium Production in Ultra-Relativistic Nuclear Collisions,
Brookhaven, NY, September 1998.

M.J.Leitch, et al., “*Vector Meson Production and Nuclear Effects in FNAL E866*,”
XIV’th International Seminar on High Energy Physics Problems (ISHEPP), Relativistic
Nuclear Physics and Quantum Chromodynamics,” Dubna, Russia, 17-22 August, 1998.

M.J.Leitch, et al., “*Vector Meson Production and Nuclear Effects in FNAL E866*,”
Workshop on Charmonium Production in Relativistic Nuclear Collisions, Seattle, WA, May
1998.

M.J. Leitch, “*New Results from Fermilab E866 - dbar/ubar of the Proton and Nuclear Effects in J/Psi Production*,” APS Division of Nuclear Physics Meeting, Whistler, BC Canada, 5-8 October 1997.

M. J. Leitch, “*Dimuon Physics and the PHENIX Detector*”, Workshop on Electromagnetic Probes of the Quark Gluon Plasma, Univ. of Washington Nuclear Theory Institute, 24-27 January, 1996.

M. J. Leitch, “*Structure Functions and Nuclear Effects at PHENIX*”, Workshop on Nuclei at HERA and Heavy Ion Physics, Brookhaven National Lab, November 17-19, 1995.

M. J. Leitch, “*E772 Results*”, invited talk given at the Hard Probes Collaboration Meeting, European Center for Theory, Trento, Italy, 28 May - 9 June 1995.

M. J. Leitch, et al., "Nuclear Effects on Heavy Quark Production, Results from Fermilab Experiments E772 and E789," Quark Matter '91, Gatlinburg, Tennessee, November 11-15, 1991, Nucl. Phys. A544, 197c-208c (1992).

M. J. Leitch, et al., "Nuclear Medium Effects on Quarks, Gluons, and on Vector-meson Production: New Insights from Di-lepton Production," talk given at the "Symposium in Honor of Akito Arima: Nuclear Physics in the 1990's", Santa Fe, 1-5 May 1990.

M. J. Leitch, "Low-Energy Pion Double Charge Exchange and Nucleon-Nucleon Correlations in Nuclei," talk given at the Second LAMPF Workshop on Pion-Nucleus Double Charge Exchange, Los Alamos, NM, August 9-11, 1989.

Publications

S.S. Adler et al., (PHENIX collaboration), "Measurement of Transverse Single-Spin Asymmetries for Mid-rapidity Production of Neutral Pions and Charged Hadrons in Polarized $p+p$ Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 95, 202001 (2005) & nucl-ex/0510047.

S.S. Adler et al., (PHENIX collaboration), "Mid-Rapidity Direct-Photon Production in $p+p$ Collisions at $\sqrt{s} = 200 \text{ GeV}$ ", Phys. Rev. D71, 071102 (2005).

S.S. Adler et al., (PHENIX collaboration), "Formation of dense partonic matter in relativistic nucleus-nucleus collisions at RHIC: Experimental evaluation by the PHENIX collaboration. Status of our program to create, detect and characterize quark-gluon plasma" Nucl. Phys. A, Vol. 757, Issues 1-2, 8 August 2005, pgs. 184-283, & nucl-ex/0410003.

S.S.Adler et al., (PHENIX collaboration), “*Saturation of azimuthal anisotropy in Au_Au collisions at $\sqrt{s_{NN}} = 62\text{-}200 \text{ GeV}$* ,” Phys. Rev. Lett. 94, 232302 (2005) & nucl-ex/0411040.

S.S.Adler et al., (PHENIX collaboration), “ *$\pi^0/\text{photon } v_2$ in Au+Au collisions at $\sqrt{s_{NN}}=200 \text{ GeV}$* ”, nucl-ex/0508019.

S.S.Adler et al., (PHENIX collaboration), “*Centrality Dependence of Direct Photon Production in $\sqrt{s_{NN}} = 200 \text{ GeV}$ Au+Au Collisions*,” Phys. Rev. Lett. 94, 232301 (2005) & nucl-ex/0507004.

S.S.Adler et al., (PHENIX collaboration), “*Measurement of Single Electron Event Anisotropy in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$* ,” Phys. Rev. C72, 024901 (2005) & nucl-ex/0502009.

S.S.Adler et al., (PHENIX collaboration), “*Jet Structure in d+Au collisions at $\sqrt{s_{NN}}=200 \text{ GeV}$* ”, nucl-ex/0510021.

S.S. Adler et al., (PHENIX collaboration), “ *J/ψ Production and Nuclear Effects for d+Au and p+p Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$* ”, Phys. Rev. Lett. 96, 012304 (2006) and nucl-ex/0507032.

S.S. Adler et al., (PHENIX collaboration), “*Single Electrons from Heavy-Flavor Decays in p+p Collisions at $\sqrt{s} = 200 \text{ GeV}$* ”, hep-ex/0508034.

S.S.Adler et al., (PHENIX collaboration), “*Nuclear Modificaton Factors for Hadrons At Forward and Backward Rapidities in Deuteron-Gold Collisions at $\sqrt{s_{nn}} = 200 \text{ GeV}$* ,” Phys. Rev. Lett. 94, 082302 (2005) & nucl-ex/0411054.

S.S.Adler et al., (PHENIX collaboration), “*Centrality Dependence of Charm Production from Single Electrons in Au+Au Collisions at $\sqrt{s_{NN}}=200 \text{ GeV}$* ,” Phys. Rev. Lett. 94, 082301 (2005) & nucl-ex/0409028.

S.S.Adler et al., (PHENIX collaboration), “*Jet Structure of Baryon Excess in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$* ,” Phys. Rev. C71, 051902 (2005) & nucl-ex/0408007..

S.S.Adler et al., (PHENIX collaboration), “*Modifications to Di-Jet Hadron Pair Correlations in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$* ,” nucl-ex/0507004.

S.S.Adler et al., (PHENIX collaboration), “*Double Helicity Asymmetry in Inclusive Mid-Rapidity neutral pion Production for Polarized p+p Collisions at $\sqrt{s}=200 \text{ GeV}$* ,” Phys. Rev. Lett. 93, 202002 (2004) and hep-ex/0404027.

S.S. Adler et al., (PHENIX collaboration), “*Absence of Suppression in Particle Production at Large Transverse Momentum in $\sqrt{s_{NN}} = 200 \text{ GeV}$ d+Au Collisions*”, Phys. Rev. Lett. 91, 072303 (2003) and nucl-ex/0306021.

S.S. Adler et al., (PHENIX collaboration), “*Measurement of Non-Random Event-by-Event Average Transverse Momentum Fluctuations in $\sqrt{s_{NN}}=200 \text{ GeV}$ Au+Au Collisions*” Phys. Rev. Lett. 93, 092301 (2004) and nucl-ex/0310005.

S.S. Adler et al., (PHENIX collaboration), "Identified Charged Particle Spectra and Yields in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ " Phys. Rev. C 69, 034909 (2004) and nucl-ex/0307022.

S.S. Adler et al., (PHENIX collaboration), "Midrapidity Neutral Pion Production in Proton-Proton Collisions at $\sqrt{s} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 91, 241803 (2003) and hep-ex/0304038.

S.S. Adler et al., (PHENIX collaboration), "High-pt Charged Hadron Suppression in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ " Phys. Rev. C 69, 034910 (2004) and nucl-ex/0308006.

S.S. Adler et al., (PHENIX collaboration), "Elliptic Flow of Identified Hadrons in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 91, 182301 (2003) and nucl-ex/0305013.

S.S. Adler et al., (PHENIX collaboration), "Bose-Einstein Correlations of Charged Pion Pairs in Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 93, 152302 (2004) and nucl-ex/0401003.

S.S. Adler et al., (PHENIX collaboration), "Deuteron and anti-deuteron production in Au+Au collisions at $\sqrt{s} = 200 \text{ GeV}$," Phys. Rev. Lett. 94, 122302 (2005) & nucl-ex/0406004.

S.S. Adler et al., (PHENIX collaboration), "Systematic Studies of the Centrality and $\sqrt{s_{NN}}$ Dependence of $dE_T/d\eta$ and $dN_{ch}/d\eta$ in Heavy Ion Collisions at Mid-rapidity," Phys. Rev. C71, 034908 (2005) & nucl-ex/0409015.

T. Chang et al., (E866/NuSea collaboration), "J/Psi polarization in 800 GeV p-Cu interactions", Phys. Rev. Lett. 91, 211801 (2003) and hep-ex/0308001.

J.C. Web et al., (E866/NuSea collaboration), "Absolute Drell-Yan dimuon cross sections in 800-GeV/c p-p and p-d collisions", submitted to Phys. Rev. D and hep-ex/0302019.

S.S. Adler et al., (PHENIX collaboration), "J/Psi Production in Au-Au Collisions at $\sqrt{s} = 200 \text{ GeV}$ at the Relativistic Heavy Ion Collider", Phys. Rev. C69, 014901 (2004) and nucl-ex/0305030.

S.S. Adler et al., (PHENIX collaboration), "J/psi production from proton-proton collisions at $\sqrt{s} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 92, 051802 (2004) and hep-ex/0307019.

S.S. Adler et al., (PHENIX collaboration), "Production of phi mesons at mid-rapidity in $\sqrt{s_{NN}} = 200 \text{ GeV}$ Au+Au collision at RHIC," Phys. Rev. C72, 014903 (2005) & nucl-ex/0410012.

S.S. Adler et al., (PHENIX collaboration), "Scaling properties of proton and anti-proton production in $\sqrt{s_{NN}} = 200 \text{ GeV}$ Au+Au collisions" Phys. Rev. Lett. 91, 072301 (2003) and nucl-ex/0305036.

S.S. Adler et al., (PHENIX collaboration), "Suppressed pi^0 Production at Large Transverse Momentum in Central Au+Au Collisions at $\sqrt{s_{NN}} = 200 \text{ GeV}$ ", Phys. Rev. Lett. 91, 072301 (2003) and nucl-ex/0304022.

K. Adcox et al., (PHENIX collaboration), "Centrality Dependence of the High p_T Charged Hadron Suppression in Au+Au collisions at $\sqrt{s_{NN}} = 130 \text{ GeV}$ ", Physics Letters B, vol 561/1-2, 82 (2003) and nucl-ex/0207009.

K. Adcox et al., (PHENIX collaboration), "Measurement of the Lambda and Anti-Lambda Particles in Au+Au Collisions at $\sqrt{s_{NN}} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 89, 092302 (2002) and nucl-ex/0204007.

K. Adcox et al., (PHENIX collaboration), "Measurement of single electrons and implications for charm production in Au+Au collisions at $\sqrt{s} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 88, 19203 (2002) and nucl-ex/0202002.

K. Adcox, et al., (PHENIX collaboration), "Transverse mass dependence of the two-pion correlations in Au+Au collisions at $\sqrt{s_{NN}} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 88, 192302 (2002) and nucl-ex/0201008.

K. Adcox et al., (PHENIX collaboration), "Single Identified Hadron Spectra from $\sqrt{s_{NN}} = 130 \text{ GeV}$ Au+Au Collisions", Phys. Rev. C69, 024904 (2004) and nucl-ex/0307010.

K. Adcox et al., (PHENIX collaboration), "Net Charge Fluctuations in Au+Au Interactions at $\sqrt{s_{NN}} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 89, 082301 (2002) and nucl-ex/0203014.

K. Adcox, et al., (PHENIX collaboration), "Centrality dependence of π^+ , K^+ , p and $p\bar{p}$ production from $\sqrt{s} = 130 \text{ GeV}$ Au + Au collisions at RHIC", Phys. Rev. Lett. 88, 242301 (2002) and nucl-ex/0112006.

K. Adcox et al., (PHENIX collaboration), "Event-by-event fluctuations in Mean p_T and mean E_T in $\sqrt{s_{NN}} = 130 \text{ GeV}$ Au+Au Collisions", Phys. Rev. C66, 024901 (2002) and nucl-ex/0203015.

K. Adcox et al., (PHENIX collaboration), "Flow Measurements via Two-particle Aximuthal Correlations in Au+Au Collisions at $\sqrt{s_{NN}} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 89, 212301 (2002) and nucl-ex/0204005.

K. Adcox, et al., (PHENIX collaboration), "Suppression of Hadrons with Large Transverse Momentum in Central Au+Au Collisions at $\sqrt{s} = 130 \text{ GeV}$ ", Phys. Rev. Lett. 88, 022301 (2002) and nucl-ex/0109003.

J.M. Moss, G.T. Garvey, M.B. Johnson, M.J. Leitch, P.L. McGaughey, J.-C. Peng, B.Z. Kopeliovich, I.K. Potashnikova, "Energy loss of fast quarks in nuclei", hep-ph/0109014.

M.B.Johnson, B.Z.Kopeliovich, I.K. Potashnikova, P.L McGaughey, J.M.Moss, J.C.Peng, G.Garvey, M.Leitch,C.N.Brown,D.M.Kaplan, "Energy Loss versus Shadowing in the Drell-Yan Reaction in Nuclei," Phys. Rev. C65, 025203 (2002) and hep-ph/0105195.

M.B.Johnson, et al., "Energy loss of fast quarks in nuclei," Phys. Rev. Lett. 86, 4483-4487 (2001) and hep-ex/0010051.

K. Adcox, et al., (PHENIX collaboration), "Measurement of the mid-rapidity transverse energy distribution form $\sqrt{s_{NN}} = 130 \text{ GeV}$ Au+Au collisions at RHIC," Phys. Rev. Lett. 87, 052301 (2001) and nucl-ex/0104015.

K. Adcox, et al., (PHENIX collaboration), “*Centrality Dependence of Charged Particle Multiplicity in Au-Au Collisions at $\sqrt{s} = 130 \text{ GeV}$* ,” Phys. Rev. Lett. 86, 3500 (2001) and nucl-ex/0012008.

R.S. Towell, et al, (E866/NuSea collaboration), “*Improved Measurement of the d-bar/u-bar Asymmetry in the Nucleon Sea,*” Phys. Rev. D64, 052002 (2001) and hep-ex/0103030.

C.N. Brown, et al., (E866/NuSea collaboration), “*Observation of Polarization in Bottomonium Production at $\sqrt{s} = 38.8 \text{ GeV}$* ,” Phys.Rev.Lett. 86, 2529-2532 (2001) and hep-ex/0011030.

W.B. Tippens, et al., “Measurement of Charge Symmetry Breaking by the Comparison of $\pi + D \rightarrow p \bar{p}$ Eta with $\pi^- D \rightarrow NN$ Eta,” Phys. Rev. D63, 052001 (2001).

D. Pripstein, et al., (E866/NuSea collaboration), ”*Search for flavor-changing neutral currents and lepton-family-number violation in two-body D0 decays,*” Phys.Rev. D61 (2000) 032005.

M.J. Leitch, et al., (E866/NuSea collaboration), “*Measurement of Differences Between J/Ψ and Ψ' Suppression in $p-A$ Collisions,*” Phys. Rev. Lett. 84 (10 April 2000), nucl-ex/9909007.

M.A.Vasiliev, et al. (E866/NuSea collaboration), “*Parton Energy Loss Limits and Shadowing in Drell-Yan Dimuon Production,*” Phys. Rev. Lett. 83, 2304 (September 1999).

J.C.Peng, G.T.Garvey, T.C.Awes, M.E.Beddo, M.L.Brooks, C.N.Brown, J.D.Bush, T.A.Carey, T.H.Chang, W.E.Cooper, C.A.Gagliardi, D.F.Geesaman, E.A.Hawker, X.C.He, L.D.Isenhower, S.B.Kaufman, D.M.Kaplan, P.N.Kirk, D.D.Koetke, G.Kyle, D.M.Lee, W.M.Lee, M.J.Leitch, N.Makins, P.L.McGaughey, J.M.Moss, B.A.Mueller, P.M.Nord, B.K.Park, V.Papavassiliou, G.Pettit, P.E.Reimer, M.E.Sadler, P.W.Stankus, W.E.Sondheim, T.N.Thompson, R.S.Towell, R.E.Tribble, M.A.Vasiliev, Y.C.Wang, Z.F.Wang, J.C.Webb, J.L.Willis, D.K.Wise, and G.R.Young, “*dbar/ubar Asymmetry and the Origin of the Nucleon Sea,*” Phys. Rev. D58, 092004 (September 1998).

E.A.Hawker, T.C.Awes, M.E.Beddo, C.N.Brown, J.D.Bush, T.A.Carey, T.H.Chang, W.E.Cooper, C.A.Gagliardi, G.T.Garvey, D.F.Geesaman, X.C.He, L.D.Isenhower, S.B.Kaufman, D.M.Kaplan, P.N.Kirk, D.D.Koetke, G.Kyle, D.M.Lee, W.M.Lee, M.J.Leitch, N.Makins, P.L.McGaughey, J.M.Moss, B.A.Mueller, P.M.Nord, B.K.Park, V.Papavassiliou, J.C.Peng, G.Pettit, P.E.Reimer, M.E.Sadler, J.Seldon, P.W.Stankus, W.E.Sondheim, T.N.Thompson, R.S.Towell, R.E.Tribble, M.A.Vasiliev, Y.C.Wang, Z.F.Wang, J.C.Webb, J.L.Willis, D.K.Wise, and G.R.Young, “*Measurement of the Light Antiquark Flavor Asymmetry in the Nucleon Sea,*” Phys. Rev. Lett. 80, 3715-3718 (April 1998).

N. Saito, et al. (PHENIX collaboration), “*Spin Physics with the PHENIX Detector System,*” Nucl. Phys. A638, 575-578 (1998).

D. P. Morrison, et al. (PHENIX collaboration), “*The PHENIX Experiment at RHIC,*” Nucl. Phys. A638, 565-570 (1998).

C. N. Brown, et al., (E789 collaboration), “*Nuclear Dependence of Single-Hadron and Dihadron Production in $p-A$ Interactions at $\sqrt{s} = 38.8 \text{ GeV}$,*” Phys. Rev. C 54, 3195-3198 (December 1996).

M. J. Leitch, M. E. Anderson, J. Kapustinsky, T. K. Li, C. S. Mishra, J. C. Peng, J. E. Simmons, S. A. Dytman, J. G. Hardie, K. F. Von Reden, and C. Smith, "Performance of a BGO-NaI η spectrometer," Nucl. Instrum. Meth. A374, 299-302 (June 1996).

M. H. Schub, T. A. Carey, R. G. Jeppesen, M. J. Leitch, J. C. Peng, C. N. Brown, Y. B. Hsiung, J. Sa, D. M. Kaplan, C. Lee, G. Miller, and P. K. Teng, "Use of a Track Vertex Processor in a Fixed-Target Charm Experiment," Nucl. Instrum. Meth. 376, 49-58 (June 1996).

M. J. Leitch, et al., (E789 collaboration), "Nuclear Dependence of J/Ψ Production by 800 GeV/c Protons near $x_F = 0$," Phys. Rev. D 52, 4251-4253 (October 1995).

M. H. Schub, et al., (E789 collaboration), "Measurement of J/Ψ and Ψ' production in 800 GeV/c proton-gold collisions," Phys. Rev. D 52, 1307-1315 (August 1995).

D. M. Jansen, et al., (E789 collaboration), "Measurement of the bottom-quark production cross section in 800 GeV/c proton-gold collisions", Phys. Rev. Lett. 74, 3118-3121 (April 1995).

C. S. Mishra, et al., (E789 collaboration), "Search for the Decay $D_0 \rightarrow \mu^+ \mu^-$," Phys. Rev. D50, 9-12 (July 1994).

P. L. McGaughey et al. (E772 collaboration), "Cross-Sections for the Production of High Mass Muon Pairs from 800- GeV Proton Bombardment of 2H ," Phys. Rev. D50, 3038-3045 (September 1994).

J. D. Bowman, D. Fitzgerald, M. J. Leitch, J. Ouyang, S. Hoibraten, R. J. Peterson, D. L. Prout, M. E. Sadler, "Performance of a Sampling Grid Scintillator", Nucl. Instrum. Meth. A349, 32-36 (September 1994).

S. A Dytman, W. W. Daehnick, J. G. Hardie, M. Yamazaki, E. Booth, J. Miller, M. J. Leitch, C. S. Mishra, J. C. Peng, D. R. Tieger, and K. F. von Reden, "Study of Baryon Resonances Through $\gamma p \rightarrow \eta n$ Differential Cross Sections", Phys. Rev. C 51, 2710-2715 (May 1995).

M. L. Dowell, S. Gilad, E. Piasetzky, S. Hoibraten, H. W. Baer, E. J. Beise, J. D. Bowman, G. W. dodson, F. Irom, J. N. Knudson, G. S. Kyle, M. J. Leitch, L. D. Pham, R. P. Redwine, S. H. Rokni, L. C. Smith, D. R. Tieger, and S. A. Wood, "Measurements of Quasi-Elastic Pion Single Charge Exchange on 3He at $T_\pi = 245 MeV$ ", Phys. Lett. B344, 91-97 (May 1995).

M.J.Leitch, J.Boissevain, T.A.Carey, D.M.Jansen, R.G.Jeppesen, J.S.Kapustinsky, D.W.Lane, J.W.Lillberg, P.L.McGaughey, J.M.Moss, J.C.Peng, L.D.Isenhower, M.E.Sadler, R.Schnathorst, G.Gidal, P.M.Ho, M.S.Kowitt, K.B.Luk, D.Pripstein, L.M.Lederman, M.H.Schub, C.N.Brown, W.E.Cooper, H.D.Glass, K.N.Gounder, C.S.Mishra, D.M.Kaplan, W.R.Luebke, V.M.Martin, R.S.Preston, J.Sa, V.Tanikella, R.Childers, C.W.Darden, J.R.Wilson, Y.C.Chen, G.C.Kiang, and P.K.Teng, "Nuclear Dependence of Neutral D-Meson Production", Phys. Rev. Lett. 72, 2542-2545 (18 April 1994).

M.S. Kowitt, G. Gidal, P.M. Ho, K.B. Luk, D. Pripstein, L.D. Isenhower, M.E. Sadler, R. Schnathorst, R. Schwint, L.M. Lederman, M.H. Schub, C.N. Brown, W.E. Cooper, H.D. Glass, K.N. Gounder, C.S. Mishra, J. Boissevain, T.A. Carey, D.M. Jansen, R.G. Jeppesen, J.S. Kapustinsky, D.W. Lane, M.J. Leitch, J.W. Lillberg, P.L. McGaughey, J.M. Moss, J.C. Peng,

D.M. Kaplan, W.R. Luebke, V.M. Martin, R.S. Preston, J. Sa, V. Tanikella, R. L. Childers, C.W. Darden, J.R. Wilson, G.C. Kiang, P.K. Teng, Y.C. Chen, "Production of J/Ψ at Large x_F in 800- GeV/c p Copper and p Beryllium Collisions," Phys. Rev. Lett. 72, 1318-1321 (February 1994).

M. J. Leitch, et al., "Nuclear Effects on Heavy Quark Production, Results from Fermilab Experiments E772 and E789," Quark Matter '91, Gatlinburg, Tennessee, November 11-15, 1991, Nucl. Phys. A544, 197c-208c (July 1992).

D. B. Barlow, B. M. K. Nefkens, C. Pillai, J. W. Price, K. W. Jones, M. J. Leitch, C. S. Mishra, C. L. Morris, J.-C. Peng, J. M. Tinsley, M. J. Wang, P. K. Teng, and I. Slaus, " 3He and 4He Production by 800 MeV Protons from C, Ti, and Pb at Forward Angles", Phys. Rev. C45, 293-298 (January 1992).

P.L. McGaughey, J.M. Moss, D.M. Alde, H.W. Baer, T.A. Carey, G.T. Garvey, A. Klein, C. Lee, M.J. Leitch, J.W. Lillberg, C.S. Mishra, J.C. Peng, G. Danner, M.J. Wang, C.N. Brown, W.E. Cooper, Y.B. Hsiung, M.R. Adams, R. Guo, D.M. Kaplan, R.L. McCarthy, M.L. Barlett, G.W. Hoffmann, "Limit on the Anti-d / Anti-u Asymmetry of the Nucleon Sea From Drell-Yan Production", Phys. Rev. Lett. 69, 1726-1728, (September 1992).

M. J. Leitch, H.W. Baer, A. Klein, C.S. Mishra, Z. Weinfeld, E. Piasezky, Y. Ezra, R. Weiss, C. Allogwer, J.R. Comfort, J. Tinsley, D.H. Wright, "Energy Dependence of Low-Energy Pion Double Charge Exchange on the Calcium Isotopes", Phys. Lett. B294, 157-161 (1992).

M. J. Leitch, D. M. Alde, H. W. Baer, T. A. Carey, G. T. Garvey, A. Klein, C. Lee, J. W. Lillberg, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, C. N. Brown, W. E. Cooper, Y. B. Hsiung, M. R. Adams, R. Guo, D. M. Kaplan, R. L. McCarthy, G. Danner, M. J. Wang, M. L. Barlett, and G. W. Hoffman, "Nuclear Medium Effects on Quarks, Gluons, and on Vector Meson Production: New Insights from Dimuon Production," Nucl. Phys. A522, 351c-364c (January 1991).

H. W. Baer, M. J. Leitch, C. S. Mishra, Z. Weinfeld, E. Piasezky J. R. Comfort, J. Tinsley, and D. H. Wright, "Pion Double-Charge-Exchange Reaction on ^{44}Ca at 50 MeV," Phys. Rev. C43, 1458-1461 (1991).

S. Hoibraten, S. Gilad, W. J. Burger, R. P. Redwine, E. Piasezky, H. W. Baer, J. D. Bowman, F. H. Cverna, F. Irom, M. J. Leitch, J. N. Knudson, S. A. Wood, and S. H. Rokni, "Coincidence Measurements of the $(\pi^+, \pi^0 p)$ Reaction at $T_{\pi^+} = 165$ MeV," Phys. Rev. C43, 1255-1271 (1991).

D. M. Alde, H. W. Baer, T. A. Carey, G. T. Garvey, A. Klein, C. Lee, M. J. Leitch, J. W. Lillberg, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, C. N. Brown, W. E. Cooper, Y. B. Hsiung, M. R. Adams, R. Guo, D. M. Kaplan, R. L. McCarthy, G. Danner, M. J. Wang, M. L. Barlett, and G. W. Hoffman, "Nuclear Dependence of the Production of Υ Resonances at 800 GeV", Phys. Rev. Lett. 66, 2285 (1991).

D. M. Alde, H. W. Baer, T. A. Carey, G. T. Garvey, A. Klein, C. Lee, M. J. Leitch, J. W. Lillberg, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, C. N. Brown, W. E. Cooper, Y. B. Hsiung, M. R. Adams, R. Guo, D. M. Kaplan, R. L. McCarthy, G. Danner, M. J. Wang, M. L. Barlett, and G. W. Hoffman, "The A-Dependence of J/Ψ , and Ψ' Production at 800 GeV/c ", Phys. Rev. Lett. 66, 133 (1991).

W. C. Sailor, R. C. Byrd, Y. Yariv, A. I. Gavron, R. C. Hammock, M. J. Leitch, P. L. McGaughey, W. E. Sondheim, and J. W. Sunier, "Neutron Source Imaging Detector for Nuclear Arms Treaty Verification," submitted to Science and Global Security (1990), LA-UR-90-0581.

R. Guo, D. M. Kaplan, D. M. Alde, T. A. Carey, et al., "Improved Limit on Axion Production in 800-GeV Hadronic Showers," Phys. Rev. D41, 2924 (1990).

D. M. Alde, H. W. Baer, T. A. Carey, G. T. Garvey, A. Klein, C. Lee, M. J. Leitch, J. W. Lillberg, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, C. N. Brown, W. E. Cooper, Y. B. Hsiung, M. R. Adams, R. Guo, D. M. Kaplan, R. L. McCarthy, G. Danner, M. J. Wang, M. L. Barlett, and G. W. Hoffman, "Nuclear Dependence of Dimuon Production at 800 GeV," Phys. Rev. Lett. 64, 2479 (1990).

D. M. Kaplan, R. Guo, C. N. Brown, W. E. Cooper, M. J. Wang, T. A. Carey, M. J. Leitch, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, M. L. Barlett, and G. W. Hoffman, "Test of scaling of the massive-dihadron cross section," Phys. Rev. D41, 2334 (1990).

Z. Weinfeld, E. Piasetzky, M. J. Leitch, H. W. Baer, C. S. Mishra, J. R. Comfort, J. Tinsley, and D. H. Wright, "Pion Induced Transitions to Double-Isobaric-Analog States at 35 MeV on $1f^{7/2}$ -Shell Nuclei," Phys. Lett. B237, 33 (1990).

J.C. Peng, M. J. Leitch, J. D. Bowman, F. Irom, J. S. Kapustinsky, T. K. Li, L. C. Liu, C. S. Mishra, J. E. Simmons, Z. F. Wong, C. Smith, and R. R. Whitney, "Coherent η -Meson Production in the Reaction $\pi^- + {}^3He \rightarrow \eta + t$," Phys. Rev. Lett. 63, 2353 (1989).

M. J. Leitch, H. W. Baer, R. L. Burman, M. D. Cooper, A. Cui, B. J. Dropesky, G. Giesler, F. Irom, C. L. Morris, J. N. Knudson, J. R. Comfort, D. H. Wright, R. Gilman, E. Piasetzky, and Z. Weinfeld, "The ${}^{14}C(\pi^+, \pi^-){}^{14}O$ Reaction between 20 and 80 MeV," Phys. Rev. C39, 2356 (1989).

L. E. Ussery, D. J. Vieira, J. J. H. Berlijn, G. W. Butler, B. J. Dropesky, G. C. Giesler, N. Imanishi, M. J. Leitch, and R. S. Rundberg, "Excitation Function for the Pion Single-Charge-Exchange Reaction ${}^{13}C(\pi^+, \pi^-){}^{13}N(g.s.)$," Phys. Rev. C38, 2761 (1988).

S. Ahmad, G. Azuelos, M. Blecher, D. A. Bryman, R. A. Burnham, E. T. H. Clifford, P. Depommier, M. S. Dixit, K. Gotow, C. K. Hargrove, M. Hasinoff, M. Leitch, J. A. Macdonald, H. Mes, I. Navon, T. Numao, J.-M. Poutissou, R. Poutissou, P. Schlatter, J. Spuller, and J. Summhammer, "Search for Muon-Electron and Muon-Positron Conversion," Phys. Rev. D38, 2102 (1988).

D. H. Wright, M. Blecher, R. L. Boudrie, R. L. Burman, M. J. Leitch, B. G. Ritchie, D. Rothenberger, Z. Weinfeld, M. Alsolami, G. S. Blanpied, J. A. Escalante, C. S. Mishra, G. Pignault, B. M. Freedman, and C. S. Whisnant, "Elastic Scattering of 19.5 and 30 MeV Negative Pions from ${}^{12}C$," Phys. Rev. C36, 2139 (1987).

D. H. Wright, M. Blecher, B. G. Ritchie, R. L. Boudrei, R. L. Burman, M. J. Leitch, M. Alsolami, G. S. Blanpied, J. A. Escalante, C. S. Mishra, and G. Pignault, "Elastic Scattering of 30 MeV Positive and Negative Pions from Nickel Isotopes," Phys. Rev. C36, 1472 (1987).

- D. H. Wright, M. Blecher, K. Masutani, R. Seki, R. L. Boudrie, R. L. Burman, M. J. Leitch, M. Alsolami, G. Blanpied, J. A. Escalante, C. S. Mishra, G. Pignault, B. M. Preedom, C. S. Whisnant, and B. G. Ritchie, "Indication of Pionic-Atom Anomalies in Pion-Nucleus Elastic Scattering," Phys. Rev. C35, 2258 (1987).
- S. Gilad, W. J. Burger, G. W. Dodson, S. Hoibraten, L. D. Pham, R. P. Redwine, E. Piasetzky, H. W. Baer, J. D. Bowman, F. H. Cverna, M. J. Leitch, U. Sennhauser, Th. S. Bauer, C. H. Q. Ingram, G. S. Kyle, D. Ashery, S. A. Wood, and Z. Fraenkel, "Measurement of the $^{16}O(\pi^+, \pi^0 p)$ Reaction", Phys. Rev. Lett. 57, 2637 (1986).
- S. H. Rokni, H. W. Baer, A. G. Bergman, J. D. Bowman, F. Irom, M. J. Leitch, C. J. Seftor, J. Alster, E. Piasetzky, B. L Clausen, R. A. Loveman, R. J. Peterson, J. L. Ullman, J. R. Comfort, J. N. Knudson, and U. Sennhauser, "Isobaric-Analog-State Transitions in Pion Charge-Exchange Reactions above the $\Delta(1232)$ Resonance," Phys. Lett. B202, 35 (1988).
- Z. Weinfeld, E. Piasetzky, H. W. Baer, R. L. Burman, M. J. Leitch, C. L. Morris, D. H. Wright, S. H. Rokni, and J. R. Comfort, "Low-Energy Pion Double Charge Exchange on Ca Isotopes," Phys. Rev. C37, 902 (1988).
- H. W. Baer, M. J. Leitch, R. L. Burman, M. D. Cooper, A. Z. Cui, B. J. Dropesky, G. C. Giesler, F. Irom, C. L. Morris, J. N. Knudson, J. R. Comfort, D. H. Wright, and R. Gilman, "The Double-Analog Transitions $^{48}Ca(\pi^+, \pi^-)^{48}Ti$ at 35 and 50 MeV," Phys. Rev. C35, 1425 (1987).
- J. C. Peng, M. J. Leitch, J. D. Bowman, F. Irom, J. Kapustinsky, T. K. Li, J. E. Simmons, Z. F. Wong, and C. Smith, "Performance of a Lead-Glass Spectrometer for Detecting Eta Mesons," Nucl. Instrum. Meth. A261, 462 (1987).
- J. C. Peng, J. Kapustinsky, C. Lee, M. J. Leitch, T. K. Li, L. C. Liu, J. M. Moss, J. E. Simmons, S. M. Tang, C. Smith, and R. R. Whitney, "Observation of η -meson Production in the Reaction $\pi^- + {}^3He \rightarrow \eta + t$," Phys. Rev. Lett. 58, 2027 (1987).
- D. H. Fitzgerald, H. W. Baer, J. D. Bowman, M. D. Cooper, F. Irom, N. S. P. King, M. J. Leitch, E. Piasetzky, W. J. Briscoe, M. E. Saddler, K. Smith, and J. N. Knudson, "Forward-Angle Cross Sections for Pion-Nucleon Charge-Exchange Between 100 and 150 MeV/c", Phys. Rev. C34, 619 (1986).
- E. R. Siciliano, M. D. Cooper, M. B. Johnson, and M. J. Leitch, "Effects of Nuclear Correlations on Low-Energy Pion Charge-Exchange Scattering", Phys. Rev. C34, 267 (1986).
- M. J. Leitch, F. C. Lin, J. L. Matthews, W. W. Sapp, C. P. Sargent, D. J. S. Findlay, R. O. Owens, and B. L. Roberts, " $^{40}Ca(\gamma, p)^{39}K$ Reaction for $E_\gamma = 100-300$ MeV," Phys. Rev. C35, 1511 (1986).
- D. A. Bryman, E. T. H. Clifford, M. J. Leitch, I. Navon, T. Numao, P. Schlatter, M. S. Dixit, C. K. Hargrove, H. Mes, R. A. Burnham, M. Hasinoff, J. -M. Poutissou, J. A. Macdonald, J. E. Spuller, G. Azuelos, P. Depommier, J. -P. Martin, R. Poutissou, M. Blecher, K. Gotow, A. L. Carter, H. L. Anderson, and S. C. Wright, "Search for μ -e conversion in Ti," Phys. Rev. Lett. 55, 465 (1985).

J. L. Ullman, P. W. F. Alons, J. J. Kraushaar, J. H. Mitchell, R. J. Peterson, R. A. Ristinen, J. N. Knudson, J. R. Comfort, H. W. Baer, J. D. Bowman, M. D. Cooper, D. H. Fitzgerald, F. Irom, M. J. Leitch, and E. Piasetzky, "Pion Single Charge Exchange on ^{14}C from 35 to 295 MeV", Phys. Rev. C33, 2092 (1986).

M. J. Leitch, H. W. Baer, J. D. Bowman, M. D. Cooper, E. Piasetzky, U. Sennhauser, H. J. Ziock, F. Irom, J. R. Comfort, P. B. Siegel, and M. A. Moinester, "Pion Single Charge Exchange Angular Distributions at $T_\pi = 48$ MeV," Phys. Rev. C33, 278 (1986).

L. E. Ussery, D. J. Vieira, J. J. H. Berlijn, G. W. Butler, B. J. Dropesky, G. C. Giesler, N. Imanishi, M. J. Leitch, and R. S. Rundberg, "Excitation Function for the Pion Single Charge Exchange Reaction $^{13}C(\pi^+, \pi^-)^{13}N(G.S.)$," Phys. Rev. C38, 2761-2770 (1988).

F. Irom, M. J. Leitch, H. W. Baer, J. D. Bowman, M. D. Cooper, B. J. Dropesky, E. Piasetzky, and J. N. Knudson, "Energy and Mass Dependence of Low-Energy Pion Single Charge Exchange to the Isobaric Analog State," Phys. Rev. Lett. 55, 1862 (1985).

D. A. Bryman, M. J. Leitch, I. Navon, T. Numao, P. Schlatter, M. S. Dixit, C. K. Hargrove, H. Mes, R. A. Burnham, M. Hasinoff, J. -M. Poutissou, J. A. Macdonald, J. E. Spuller, G. Azuelos, P. Depommier, J. -P. Martin, R. Poutissou, M. Blecher, K. Gotow, A. L. Carter, H.. L. Anderson, and S. C. Wright, "Search for Muon Electron Conversion $\mu^- + Ti \rightarrow e^- + Ti$," Nuclear Physics A434, 469c (1985).

M. J. Leitch, J. L. Matthews, W. W. Sapp, C. P. Sargent, S. A. Wood, D. J. S. Findlay, R. O. Owens, and B. L. Roberts, " $^{16}O(\gamma, p)^{15}N$ Reaction for $E_\gamma = 100\text{-}400$ MeV," Phys. Rev. C31, 1633 (1985).

M. J. Leitch, E. Piasetzky, H. W. Baer, J. D. Bowman, R. L. Burman, B. J. Dropesky, P. A. M. Gram, F. Irom, D. Roberts, G. A. Rebka Jr., J. N. Knudson, J. R. Comfort, V. A. Pinnick, D. H. Wright, and S. A. Wood, "The Double Analog Transition $^{14}C(\pi^+, \pi^-)^{14}O$ at 50 MeV," Phys. Rev. Lett. 54, 1482 (1985).

D. A. Bryman, M. J. Leitch, I. Navon, T. Numao, P. Schlatter, M. S. Dixit, C. K. Hargrove, H. Mes, J. A. Macdonald, R. Skegg, J. E. Spuller, R. A. Burnham, M. Hasinoff, J. -M. Poutissou, G. Azuelos, P. Depommier, J. -P. Martin, R. Poutissou, M. Blecher, K. Gotow, and A. L. Carter, "Gated Grid System Used with a Time Projection Chamber," Nucl. Instrum. Methods A234, 42 (1985).

H. Mes, H. L. Anderson, G. Azuelos, M. Blecher, D. A. Bryman, R. A. Burnham, A. L. Carter, P. Depommier, M. S. Dixit, K. Gotow, C. K. Hargrove, M. Hasinoff, D. Kessler, M. J. Leitch, J. A. Macdonald, R. J. McKee, J. P. Martin, I. Navon, T. Numao, J.-M. Poutissou, R. Poutissou, P. Schlatter, J. E. Spuller, and C. S. Wright, "Update on the TPC at TRIUMF", Nucl. Instrum. Methods 225, 547 (1984).

M. E. Schulze, D. Beck, M. Farkhondeh, S. Gilad, R. Goloskie, R. J. Holt, S. Kowalski, R. M. Laszewski, M. J. Leitch, J. D. Moses, R. P. Redwine, D. P. Saylor, J. R. Specht, E. J. Stephenson, K. Stephenson, W. Turchinetz, and B. Zeidman, "Measurement of the Tensor Polarization in Electron-Deuteron Elastic Scattering," Phys. Rev. Lett. 52, 597 (1984).

D. Ashery, D. F. Geesman, R. J. Holt, H. E. Jackson, J. R. Specht, K. E. Stephenson, R. E. Segel, P. Zupranski, H. Baer, J. D. Bowman, M. D. Cooper, M. Leitch, A. Erel, J. Comuzzi, R. P. Redwine, and D. Tieger, "Inclusive Pion Single Charge Exchange Reactions", Phys. Rev. C30, 946 (1984).

I. Navon, M. J. Leitch, D. A. Bryman, T. Numao, P. Schlatter, G. Azuelos, R. Poutissou, R. A. Burnham, M. Hasinoff, J. -M. Poutissou, J. A. Macdonald, J. E. Spuller, C. K. Hargrove, H. Mes, M. Blecher, K. Gotow, M. Moinester, H. Baer, "Pion Double Charge Exchange at 50 MeV on ^{14}C ," Phys. Rev. Lett. 52, 105 (1984).

M. D. Cooper, H. W. Baer, R. Bolton, J. D. Bowman, F. Cverna, N. S. P. King, M. Leitch, J. Alster, A. Doran, A. Erell, M. A. Moinester, E. Blackmore, and E. R. Siciliano, "Angular Distribution for $^{15}N(\pi^+, \pi^0) ^{15}O(g.s.)$ at $T_\pi = 48$ MeV," Phys. Rev. Lett. 52, 1100 (1984).

H. W. Baer, R. Bolton, J. D. Bowman, M. D. Cooper, F. Cverna, N. S. P. King, M. Leitch, H. S. Matis, J. Alster, A. Doron, A. Erell, M. A. Moinester, E. Blackmore, and E. R. Siciliano, "Study of Isovector Resonances with Pion Charge Exchange," Los Alamos National Laboratory Preprint LA-UR-82-1600, talk given by H. Baer at the International Conference on Nuclear Structure, Amsterdam, 1982 and to be published in Nuclear Physics.

M. Blecher, K. Gotow, R. L. Burman, M. V. Hynes, M. J. Leitch, N. S. Chant, L. Rees, P. G. Roos, F. E. Bertrand, E. E. Gross, F. E. Obenshain, T. P. Sjoreen, G. S. Blanpied, B. M. Freedman, and B. G. Ritchie, "Isospin Effects in π^+ Elastic Scattering from ^{12}C , ^{13}C , and ^{14}C at 65 and 80 MeV," Phys. Rev. C28, 2033 (1983).

J. D. Bowman, H. W. Baer, R. Bolton, M. D. Cooper, F. Cverna, N. S. P. King, M. Leitch, H. S. Matis, A. Erell, J. Alster, A. Doron, M. A. Moinester, E. Blackmore, and E. R. Siciliano, "Observation of the Nuclear Isovector Monopole Resonance," Phys. Rev. Lett. 50, 1195 (1983).

D. Ashery, D. F. Geesman, R. J. Holt, H. E. Jackson, J. R. Specht, K. E. Stephenson, R. E. Segel, P. Zupranski, H. Baer, J. D. Bowman, M. D. Cooper, M. Leitch, A. Erel, R. Chefetz, J. Comuzzi, R. P. Redwine, and D. R. Tieger, "Isospin Effects in Pion Single-Charge-Exchange Reactions," Phys. Rev. Lett. 50, 482 (1983).

F. E. Obenshain, F. E. Bertrand, E. E. Gross, N. W. Hill, J. R. Wu, R. L. Burman, M. Hamm, M. J. Leitch, R. D. Edge, B. M. Freedman, M. A. Moinester, M. Blecher, K. Gotow, "Positive Pion-Nucleus Scattering at 20 MeV," Phys. Rev. C27, 2753 (1983).

M. D. Cooper, H. Baer, R. D. Bolton, J. D. Bowman, R. L. Burman, F. H. Cverna, M. B. Johnson, N. S. P. King, W. W. Kinnison, M. Leitch, R. Wiringa, H. J. Ziock, and Gh. Gregoire, "Search for the Reaction $^{40}Ca(\pi^+, 2\gamma)$ at $T_\pi = 50$ MeV and Critical Opalescence," International Conference on Nuclear Physics, Amsterdam (1982).

A. Doron, J. Alster, A. Erell, M. A. Moinester, R. A. Anderson, H. W. Baer, J. D. Bowman, M. D. Cooper, F. H. Cverna, C. M. Hoffman, N. S. P. King, M. J. Leitch, J. P. Piffaretti, and C. D. Goodman, "Angular Distributions of Single Pion Charge Exchange Reactions to Isobaric Analog States in Light Nuclei," Phys. Rev. C26, 189 (1982).

H. W. Baer, R. Bolton, J. D. Bowman, M. D. Cooper, F. Cverna, N. S. P. King, M. Leitch, H. S. Matis, J. Alster, A. Doran, A. Erell, M. A. Moinester, E. Blackmore, and E. R. Siciliano,

"*Observation of Analogs of the Giant Dipole Resonance in Pion Single Charge Exchange on ^{40}Ca ,*" Phys. Rev. Lett. 49, 1376 (1982).

A. Doron, J. Alster, A. Erell, S. Gilad, M. A. Moinester, R. A. Anderson, H. W. Baer, J. D. Bowman, M. D. Cooper, F. H. Cverna, C. M. Hoffman, N. S. P. King, M. J. Leitch, J. P. Piffaretti, P. R. Bevington, E. Wilkelmann, and C. D. Goodman, "*Energy Dependence of the Small-Angle Differential Cross Sections to Isobaric Analog States in $^7Li(\pi^+, \pi^0)^7Be$ and $^{13}C(\pi^+, \pi^0)^{13}N$,*" Phys. Rev. Lett. 48, 989 (1982).

C. A. Perdier, J. L. Matthews, M. J. Leitch, H. Jeremie, M. Ershad, and B. L. Roberts, "*The $^3He(\gamma, 2p)n$ Reaction for $E_\gamma = 80\text{-}170\text{ MeV}$,*" Z. Phys. A310, 317 (1983).

M. Blecher, K. Gotow, R. Ng, R. L. Burman, R. Carlini, S. Dam, M. V. Hynes, M. J. Leitch, V. Sandberg, R. Auble, F. E. Bertrand, E. E. Gross, F. E. Obenshain, J. Wu, G. S. Blanpied, B. M. Freedom, B. G. Ritchie, W. Bertozi, M. A. Kovash, R. P. Redwine, "*Pion-Nucleus Inelastic Scattering at 80 MeV,*" Phys. Rev. C25, 2554 (1982).

M. J. Leitch, R. Auble, W. Bertozi, F. E. Bertrand, G. Blanpied, M. Blecher, R. L. Burman, R. Carlini, S. H. Dam, W. Gaskin, K. Gotow, E. E. Gross, M. V. Hynes, M. A. Kovash, F. E. Obenshain, B. M. Freedom, R. P. Redwine, B. G. Ritchie, V. D. Sandberg, and J. Wu, "*Pion-Nucleus Elastic Scattering at 80 MeV,*" Phys. Rev. C29, 561 (1984).

R. J. Holt, J. R. Specht, K. Stephenson, B. Zeidman, J. S. Frank, M. J. Leitch, J. D. Moses, E. J. Stephenson, and R. M. Laszewski, "*Measurement of the Angular Distribution of Tensor Polarization in Pion-Deuteron Elastic Scattering,*" Phys. Rev. Lett. 47, 472 (1981).

B. G. Ritchie, R. D. Edge, D. J. Malbrough, B. M. Freedom, F. E. Bertrand, E. E. Gross, F. E. Obenshain, J. R. Wu, M. Blecher, K. Gotow, R. L. Burman, R. Carlini, M. E. Hamm, M. J. Leitch, and M. A. Moinester, "*The Reaction $\pi^+ + d \rightarrow p + p$ at 20 to 65 MeV,*" Phys. Rev. C24, 552 (1981).

R. J. Holt, R. M. Laszewski, J. R. Specht, E. J. Stephenson, K. E. Stephenson, J. S. Frank, M. J. Leitch, and J. D. Moses, "*Development of a Deuteron Tensor Polarimeter Suitable for Study of $e-d$ and $\pi-d$ Elastic Scattering,*" Nucl. Phys. A358, 273c (1981).

E. J. Stephenson, R. J. Holt, J. R. Specht, J. D. Moses, R. L. Burman, G. D. Crocker, J. S. Frank, M. J. Leitch, and R. M. Laszewski, "*The Design and Calibration of a High Efficiency Deuteron Tensor Polarimeter,*" Nucl. Instrum. Methods 178, 345 (1980).

R. J. Holt, J. R. Specht, E. J. Stephenson, B. Zeidman, R. L. Burman, J. S. Frank, M. J. Leitch, J. D. Moses, M. A. Yates-Williams, R. M. Laszewski, and R. P. Redwine, "*Measurement of Tensor Polarization and Cross Section for the Reaction $^2H(\pi, \pi)^2H$ at 180° ,*" Phys. Rev. Lett. 43, 1229 (1979).

D. J. S. Findlay, R. O. Owens, M. J. Leitch, J. L. Matthews, C. A. Perdier, B. L. Roberts, C. P. Sargent, "*The P-Shell Proton Momentum Distribution in ^{16}O Above the Fermi Momentum,*" Phys. Lett. 74B, 305 (1978).

J. L. Matthews, W. Bertozzi, M. J. Leitch, C. A. Peridier, B. L. Roberts, C. P. Sargent, W. Turchinetz, D. J. S. Findlay, and R. O. Owens, "Short Range High Momentum Effects in the Reaction $^{16}O(\gamma, p)$ for $E = 100\text{-}300 \text{ MeV}$," Phys. Rev. Lett. 38, 8 (1977).

W. Bertozzi, M. V. Hynes, C. P. Sargent, C. Creswell, P. C. Dunn, A. Hirsch, M. Leitch, B. Norum, F. N. Rad, and T. Sasamuma, "Focal Plane Instrumentation: A Very High Resolution MWPC System for Inclined Tracks," Nucl. Instrum. Methods 141, 457 (1977).

Erratum

D. M. Kaplan, R. Guo, C. N. Brown, W. E. Cooper, M. J. Wang, T. A. Carey, M. J. Leitch, P. L. McGaughey, C. S. Mishra, J. M. Moss, J.-C. Peng, M. L. Barlett, and G. W. Hoffman, "Test of scaling of the massive-dihadron cross section," Phys. Rev. D43, 954 (1991).

B. G. Ritchie, et al., Phys. Rev. C26, 2337 (1985); for Phys Rev. C24, 552 (1981).

R. J. Holt, et al., Phys. Rev. Lett. 47, 1862 (1985); for Phys. Rev. Lett. 47, 472 (1981).

Abstracts and Talks

M. J. Leitch, "Nuclear Dependence of D-meson Production in Proton-nucleus Collisions at 800 GeV/c ," APS Division of Nuclear Physics meeting, Santa Fe, NM, October 14-17, 1992.

M. J. Leitch, "Low-Energy Pion Double Charge Exchange and Nucleon-Nucleon Correlations in Nuclei," talk given at the Workshop on Nuclear Structure with Medium Energy Probes, Santa Fe, NM, 12 October 1988.

M. J. Leitch, J. C. Peng, M. E. Anderson, J. Kapustinsky, T. K. Li, J. E. Simmons, S. A. Dytman, K. F. VonReden, C. S. Mishra, and C. Smith, "Performance of a BGO-NaI η Spectrometer", talk given at the LAMPF Workshop on Photon and Neutral Meson Detection at Intermediate Energies, January 7-9, 1986.

M. J. Leitch, "Low Energy Charge Exchange - Low-Energy Data and Systematics", talk given at the LAMPF Workshop on Pion Double Charge Exchange, January 10-12, 1985 (Los Alamos Report LA-10550-C).

M. J. Leitch, H. W. Baer, R. L. Burman, M. D. Cooper, F. Irom, A. Cui, B. J. Dropesky, G. C. Giesler, C. L. Morris, J. N. Knudson, J. R. Comfort, D. H. Wright, and R. Gilman, "Energy Dependence for Low Energy Pion Double Charge Exchange on ^{14}C ," APS Meeting, Washington DC, 28 April - 1 May 1986.

M. J. Leitch, F. Irom, J. Comfort, M. D. Cooper, H. W. Baer, J. D. Bowman, E. Piasetzky, U. Sennhauser, H. Ziock, J. Alster, A. Erell, M. Moinester, "Low Energy Pion Single Charge Exchange Angular Distributions," APS Meeting, Wash. D.C. (1984).

M. Leitch, H.W.Baer, R.Bolton, J.D.Bowman, M.D.Cooper, F.Cverna, N.S.P.King, J.Alster, A.Doron, A.Erell, M.A.Moinester, and E.W.Blackmore, "Measurement of the (π^+, π^0) Reaction at 48 MeV on ^{15}N and ^7Li ," APS Meeting, Washington, DC (1982).

M. J. Leitch, et. al., " π^+ and π^- Elastic Scattering from ^{12}C , ^{40}Ca , ^{90}Zr , ^{208}Pb at 80 MeV," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

M. J. Leitch, J. L. Matthews, D. Ingham, W. W. Sapp, C. P. Sargent, D. J. S. Findlay, R. O. Owens, and B. L. Roberts, "The Role of the $\Delta(1232)$ Isobar in the $^{16}O(\gamma,p)$ Process," APS Meeting, Houston, TX (1979).

M. J. Leitch, J. L. Matthews, C. A. Perdier, B. L. Roberts, C. P. Sargent, D. J. S. Findlay, D. Gibson, and R. O. Owens, "The $^{16}O(\gamma,p) ^{15}N$ and $^{40}Ca(\gamma,p) ^{39}K$ Reactions in the Energy Range $E_\gamma = 40\text{-}350$ MeV," 7th International Conference on High Energy Physics and Nuclear Structure, Zurich, Switzerland (1977).

M. J. Leitch, J. L. Matthews, C. A. Perdier, B. L. Roberts, C. P. Sargent, D. J. S. Findlay, and R. O. Owens, "The $^{16}O(\gamma,p) ^{15}N$ and $^{40}Ca(\gamma,p) ^{39}K$ Reactions in the Range $E_\gamma = 100\text{-}340$ MeV," APS Meeting, Washington, DC (1977).

Other Abstract and Talks

C. S. Mishra, J. Kapustinsky, M. J. Leitch, P. McGaughey, J. C. Peng, K. Hoszscheiter, and M. Sadler, "Performance of Silicon Microstrip Detectors in High Radiation Environments," Houston APS meeting, 3-5 January 1989.

H. W. Baer, J. D. Bowman, F. Irom, M. J. Leitch, S. H. Rokni, J. Alster, E. Piasezky, B. L. Clausen, R. A. Loveman, R. J. Peterson, J. L. Ullman, J. R. Comfort, J. N. Knudson, and U. Sennhauser, "Pion-Nucleus Single-Charge Exchange Reactions above the $\Delta(1232)$ Resonance," PANIC, 1987.

Z. Weinfeld, E. Piasezky, H. W. Baer, R. L. Burman, M. J. Leitch, C. L. Morris, S. H. Rokni, D. H. Wright, and J. R. Comfort, "Low Energy Pion Double Charge Exchange on Ca Isotopes," PANIC, 1987.

D. H. Wright, M. Blecher, K. Masutani, R. Seki, B. G. Ritchie, R. L. Bourdie, R. L. Burman, M. J. Leitch, M. Alsolami, G. Blanpied, J. A. Escalante, C. S. Mishra, G. Pignault, B. M. Freedom, and C. S. Whisnant, "Elastic Scattering of Positive and Negative Pions from $^{64,60,58}Ni$ at 30 MeV," PANIC, 1987.

S. H. Rokni, H. W. Baer, J. D. Bowman, F. Irom, M. J. Leitch, J. Alster, E. Piasezky, J. R. Comfort, J. N. Knudson, B. L. Clausen, R. A. Loveman, R. J. Peterson, J. L. Ullman, A. G. Bergmann, C. J. Seftor, and U. Sennhauser, "Systematics of High Energy Pion Single Charge Exchange Reactions," APS Meeting, Washington DC, 28 April - 1 May 1986.

H. W. Baer, M. J. Leitch, R. L. Burman, M. D. Cooper, F. Irom, A. Cui, B. J. Dropesky, G. C. Giesler, C. L. Morris, J. N. Knudson, J. R. Comfort, D. H. Wright, and R. Gilman, "Measurement of the $^{48}Ca(\pi^+, \pi^-) ^{48}Ti$ Reaction at 35 and 50 MeV," APS Meeting, Washington DC, 28 April - 1 May 1986.

F. Irom, M. J. Leitch, H. W. Baer, J. D. Bowman, M. D. Cooper, B. J. Dropesky, E. Piasezky, and J. N. Knudson, "Systematics of Low Energy Pion Single Charge Exchange," APS Spring Meeting, Crystal City, VA (1985).

J. N. Knudson, J. R. Comfort, P. W. F. Alons, J. J. Kraushaar, J. H. Mitchell, R. J. Peterson, J. L. Ullman, H. W. Baer, J. D. Bowman, M. D. Cooper, F. Irom, M. J. Leitch, and E. Piasetzky, "Angular Distributions for the $^{14}C(\pi^+, \pi^0)^{14}N$ (IAS) Reaction at 50 MeV," APS Spring Meeting, Crystal City, VA (1985).

D. A. Bryman, M. J. Leitch, I. Navon, T. Numao, P. Schlatter, M. S. Dixit, C. K. Hargrove, H. Mes, R. A. Burnham, M. Hasinoff, J.-M. Poutissou, J. A. Macdonald, J. Spuller, G. Azuelos, P. Depommier, J. P. Martin, R. Poutissou, M. Blecher, K. Gotow, A. L. Carter, H. L. Anderson, and S. C. Wright, "Search for Muon Electron Conversion $\mu^- + Ti \rightarrow e^- + Ti$ ", Heidelberg PANIC Meeting (1984).

S. Gilad, W. J. Burger, G. W. Dodson, S. Hoibraten, L. D. Phan, R. P. Redwine, E. Piasetzky, H. W. Baer, J. D. Bowman, F. H. Cverna, M. J. Leitch, U. Sennhauser, Th.S. Bauer, C. H. Q. Ingram, G. S. Kyle, D. Ashery, S. A. Wood, and Z. Fraenkel, "Measurement of the $^{16}O(\pi^+, \pi^0 p)$ Reaction", Heidelberg PANIC meeting (1984).

J.-M. Poutissou, R. A. Burnham, M. Hasinoff, D. Bryman, E. T. Clifford, M. J. Leitch, I. Navon, T. Numao, P. Schlatter, G. Azuelos, P. Depommier, J.-P. Martin, R. Poutissou, M. Blecher, K. Gotow, M. S. Dixit, C. K. Hargrove, H. Mes, J. A. MacDonald, and J. E. Spuller, "Search for Muon-Electron Conversion with the TRIUMF Time Projection Chamber", Canadian Association of Physicists Congress, Sherbrooke, Quebec, June 18-20 (1984).

G. Azuelos, R. Postissou, I. Navon, M. J. Leitch, D. A. Bryman, T. Numao, P. Schlatter, R. A. Burnham, M. Hasinoff, J.-M. Poutissou, J. A. MacDonald, J. E. Spuller, C. K. Hargrove, H. Mes, M. Blecher, K. Gotow, M. Moinester, "Pion Double Charge Exchange at 50 MeV on ^{14}C ", Canadian Association of Physicists Congress, Sherbrooke, Quebec June 18-20 (1984).

S. Gilad, W. J. Burger, G. W. Dodson, L. D. Pham, S. Hoibraten, R. P. Redwine, E. Piasetzky, H. W. Baer, J. D. Bowman, F. H. Cverna, M. J. Leitch, U. Sennhauser, Th.S. Bauer, C. H. Q. Ingram, G. S. Kyle, D. Ashery, S. A. Wood, and Z. Fraenkel, "Measurement of the $^{16}O(\pi^+, \pi^0)$ Reaction", APS Meeting, Wash D.C. (1984).

J. N. Knudson, J. R. Comfort, P. Alons, J. Kraushaar, J. Mitchell, R. Ristinen, J. L. Ullman, H. W. Baer, J. D. Bowman, D. Fitzgerald, F. Irom, M. J. Leitch, and E. Piazetski, "The $^{14}C(\pi^+, \pi^0)^{14}N$ IAS Reaction at Low Energies", APS Meeting, Wash. D.C. (1984).

A. L. Hallin, H. W. Baer, J. D. Bowman, F. Irom, M. J. Leitch, J.-C. Peng, J. R. Comfort, and J. N. Knudson, "Angular distributions for the $^{15}N(\pi^+, \pi^0)^{15}O$ Reaction to the Isobaric Analog State at 100 and 295 MeV", APS Meeting, Wash. D.C. (1984).

D. H. Fitzgerald, H. W. Baer, J. D. Bowman, F. Irom, N. S. P. King, M. J. Leitch, E. Piasetzky, W. J. Briscoe, M. E. Saddler, K. Smith, and J. N. Knudson, "Forward-Angle Cross Sections for Pion-Nucleon Charge-Exchange Scattering at Momenta Between 100 and 150 MeV/c", APS Meeting, Wash. D.C. (1984).

F. Irom, J. Comfort, H. W. Baer, J. D. Bowman, M. D. Cooper, E. Piasetzky, U. Sennhauser, H. Ziock, J. Alster, A. Erell, M. Moinester, and M. Leitch, "Energy Dependence at the 0° Cross Section for the $^7Li(\pi^+, \pi^0)^7Be$ (IAS) Reaction in the Range 35 to 295 MeV," APS Meeting, Baltimore, MD (1983).

M. Schulze, D. Beck, W. Bertozzi, M. Farkhonreh, S. Gilad, S. Kowalski, R. Redwine, W. Turchinetz, R. Holt, J. Specht, K. Stephenson, B. Zeidman, E. Stephenson, J. Moses, R. Goloskie, D. Saylor, and M. Leitch, "Measurement of Tensor Polarization in Elastic Electron-Deuteron Scattering," APS Meeting, Baltimore, MD (1983).

H. S. Matis, H.W.Baer, R.Bolton, J.D.Bowman, M.D.Cooper, F.Cverna, N.S.P.King, M.J.Leitch, J.Alster, A.Doron, A.Erell, M.Moinester, and E.W.Blackmore, "Evidence for the Isovector Giant Monopole and Dipole Resonances Using Pion Single Charge Exchange Scattering on ^{120}Sn ," APS Meeting, Washington, DC (1982).

H. W. Baer, R. Bolton, J. D. Bowman, M. C. Cooper, F. Cverna, N. S. P. King, M. J. Leitch, H. S. Matis, J. Alster, A. Doron, A. Erell, M. Moinester, and E. W. Blackmore, "Observation of Analogs of the Giant Dipole Resonance in Pion Single Charge Exchange on ^{40}Ca ," APS Meeting, Asilomar, CA (Oct. 1981), also LAMPF report LA-UR-81-2493, and APS Meeting, Washington, DC (1982).

M. Blecher, R. Auble, F. E. Bertrand, W. Bertozzi, G. Blanpied, R. L. Burman, R. Carlini, S. Dam, W. Gaskin, K. Gotow, E. E. Gross, M. V. Hynes, M. A. Kovash, M. J. Leitch, F. E. Obenshain, B. M. Freedom, R. P. Redwine, B. G. Ritchie, V. Sandberg, and J. Wu, "80 MeV π^+ Nucleus Elastic Scattering," 9th International Conference on High Energy Physics and Nuclear Structure, Versailles, France (1981).

B. G. Ritchie, R. D. Edge, D. J. Malbrough, B. M. Freedom, F. E. Bertrand, E. E. Gross, F. E. Obenshain, J. R. Wu, M. Blecher, K. Gotow, R. L. Burman, R. Carlini, M. E. Hamm, M. J. Leitch, M. A. Moinester, "The Reaction $\pi + d \rightarrow p + p$ at 20 to 65 MeV," 9th International Conference on High Energy Physics and Nuclear Structure, Versailles, France (1981).

M. Blecher, R. Auble, F. E. Bertrand, W. Bertozzi, G. Blanpied, R. L. Burman, R. Carlini, S. Dam, W. Gaskin, K. Gotow, E. E. Gross, M. V. Hynes, M. A. Kovash, M. J. Leitch, F. E. Obenshain, B. M. Freedom, R. P. Redwine, B. G. Ritchie, V. Sandberg, and J. Wu, "Giant Resonance Excitation in ^{40}Ca with 80-MeV π^+ ," 9th International Conference on High Energy Physics and Nuclear Structure, Versailles, France (1981).

R. Ng, M. Blecher, R. Auble, F. E. Bertrand, W. Bertozzi, G. Blanpied, R. L. Burman, R. Carlini, S. Dam, W. Gaskin, K. Gotow, E. E. Gross, M. V. Hynes, M. A. Kovash, M. J. Leitch, F. E. Obenshain, B. M. Freedom, R. P. Redwine, B. G. Ritchie, V. Sandberg, and J. Wu, "80 MeV π^- Nucleus Inelastic Scattering" 9th International Conference on High Energy Physics and Nuclear Structure, Versailles, France (1981).

K. Stephenson, et al., "Measurement of the Recoil Deuteron Tensor Polarization in π -d Scattering at $T_\pi = 142$ MeV," APS Meeting, Baltimore, MD (1981).

B. G. Ritchie, et al., "Angular Distribution and Total Cross Sections for the $\pi^+ + d \rightarrow p + p$ Reaction with $T_\pi = 20$ to 65 MeV," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

C. D. Goodman, et al., "Pion Single-Charge Exchange on Carbon Isotopes," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

H. W. Baer, et. al., "Measurement of $^{40,42,44,48}\text{Ca}(\pi^+, \pi^0)$ Reactions," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

F. E. Obenshain, et al., "Positive Pion-Nucleus Scattering at 20 MeV," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

M. Blecher, et al., "Giant Resonance Excitation of ^{40}Ca with π^+ and π^- at 80 MeV," International Conference on Nuclear Physics, Berkeley, CA (Aug. 1980).

R. R. Holt, et al., "Observation of the Cross Section and Tensor Polarization in π -d Elastic Scattering at 180° ," International Conference on High Energy and Nuclear Structure, Vancouver, Canada (Aug. 1979).

B. G. Ritchie, et al., "Measurements of Angular Distributions for the $\pi^+ + d \rightarrow p + p$ Reaction in the Energy Range from 20 to 65 MeV," APS Meeting, Washington, DC (April 1979).

D. J. S. Findlay, R. O. Owens, M. J. Leitch, J. L. Matthews, C. A. Peridier, B. L. Roberts, and C. P. Sargent, "Momentum Distributions in the High-Energy (γ, p) Reaction," APS Meeting, Washington, DC (1977).

J. L. Matthews, W. Bertozzi, M. J. Leitch, C. P. Sargent, W. Turchinetz, and R. O. Owens, "The $^{16}\text{O}(\gamma, p)^{15}\text{N}$ Reaction for $E_\gamma = 120\text{-}200$ MeV," APS Meeting, Washington, DC (1975).